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10/642,601	08/19/2003	Junji Ooi	241717US6	2835
22850 7590 07/17/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER GEREZGIHER, YEMANE M	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/642,601	<b>Applicant(s)</b> OOI ET AL.	
	<b>Examiner</b> Yemane M. Gerezgiher	<b>Art Unit</b> 2144	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This application has been examined. Claims 1-38 are now pending in this application.

***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in this instant Application filed on 08/19/2003.

***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 2-7, 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- In Claim 2, Claim Line 5, the inventive entity recites “the other apparatus”. However, there is insufficient antecedent basis. No “other apparatus” was previously defined in the claim. Further, the same problem occurs in Claim 3, Claim Line 5, and in Claim 4, Claim Line 4.
- In Claim 5, Claim Line 4 and 8, the inventive entity recites “the other party”, which lack antecedent basis. No “other party” was previously defined in the claim.
- Claim 21, Claim Lines 3-4 recite “the third information processing apparatus”, which lack antecedent basis. No “third information processing” was previously defined in the claim.
- Claim 22, Claim Lines 5-6 recites “said third information processing apparatus”, which lack antecedent basis. No “third information processing” was previously defined in the claim.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

a. Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 24 and 38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 24 and 38 call for **"a Computer Program for ...."** (See Claim 24, Claim Line 1 and Claim 38, Claim Line 1). These claims are directed to a non-statutory subject matter (**a software per se**), which is not tangibly stored on a computer readable storage medium so to be executable by a computer system. Thus, claims 24 and 38 are rejected as being directed to a non-statutory subject matter.

Note: A computer program should be stored in a computer readable storage medium to be realized by a computer system.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashemi (US 20030212804 A1) in view of Kim et al (USPAT 6,714,253) hereinafter referred to as Kim.

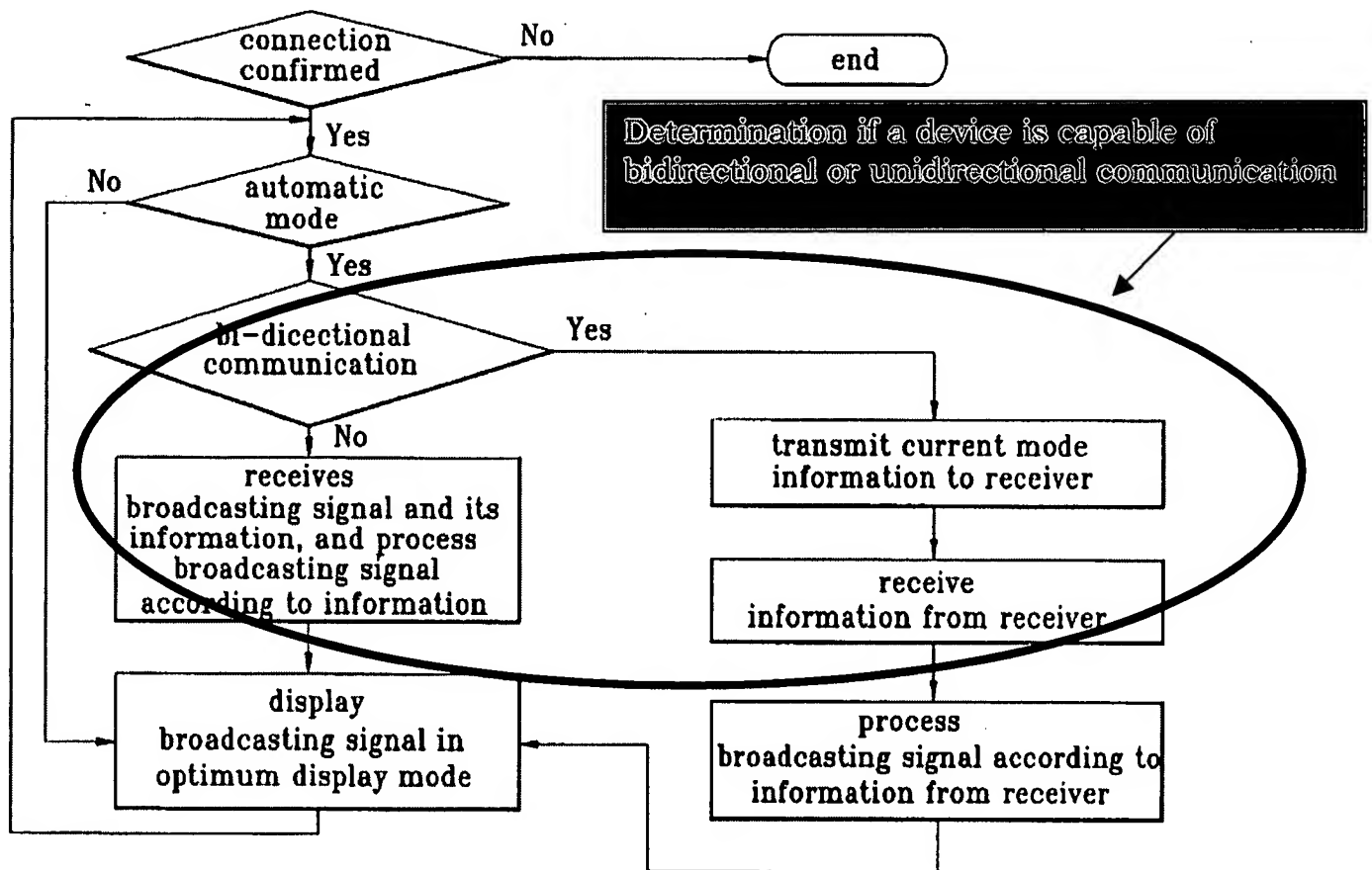
As per claim 1, Hashemi discloses an information processing system having a first information processing apparatus [Fig. 1A # 104 and Page 1, ¶0023, a first computing device] and a second information processing apparatus for transferring information via a network [Fig. 1, and Page 1, ¶¶0004-0008 and Page 2, ¶0024, any one of a the plurality of communication device receiving and/or transmitting information], said information processing system comprising: first execution means for performing a connection procedure for transferring main information from said first information processing apparatus to said second information processing apparatus [Hashemi, Fig. 1A, # 104 (computing device) communicating media information to another peer (second computer) in the communication network]; and second execution means for determining whether said first information processing apparatus has a bidirectional function for transmitting the main information and for receiving the main information [page 2, ¶0024, "...the computing device...configured to both send and receive streams of media"] or has a unidirectional function such that said first information processing apparatus has a transmission function but not a receiving function [page 2, ¶0024,

“...the computing device can also be configured to only send to only receive a stream of a media”], and for performing a connection procedure for transferring the main information from said second information processing apparatus to said first information processing apparatus [Hashemi, page 2, ¶0025. “...computer 130 to communicate with other computers, ... such as another user computer... the connection module 134 configures computer 130 to communicate with the other computers or devices thereby establishing a connection. A connection or communication between computers can be established with a connection-oriented protocol, a connectionless oriented protocol, or both...” and page 3, ¶0039, Hashemi discloses that when a computer is only to send a stream of media information, then a P2P communication is established using a connectionless protocol and when the computer is configured to both transmit and receive establishing a P2P connection utilizing a TCP/IP].

Hashemi substantially disclosed the invention as recited. Hashemi further taught that the communication devices being configured to both receive and transmit and some communication devices being capable of only receiving or transmitting information objects between peers in the centralized P2P communication system as recited (see Hashemi, page 2, ¶¶0024-0025 & page 3, ¶0039). However, Hashemi is silent about the step of determining a bidirectional or a unidirectional function of the communication device. However, as evidenced by the teachings of Kim, determining a bidirectional or a

unidirectional function of the communication device was known in the art at the time the invention was made (see Kim, Fig. 5, disclosed below, Column 4, Line 47 through Column 5, Line 25).

FIG.5



Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings of Kim related to a function of determining a bidirectional and/or unidirectional capability of a communication device and have modified the teachings of Hashemi in order to facilitate the invention by allowing



communication based on the capability of the communication terminals on the network (Hashemi, Page 2, ¶0024-0025, Page 3, ¶0039 and Kim, Column 5, Lines 5, Lines 3-30).

As per claim 2, Hashemi discloses the limitations, substantially as claimed, as described in claim 1, wherein, in the connection procedure for transferring the main information, one of said first information processing apparatus and said second information processing apparatus transmits, to the other apparatus, information of the connection destination to which the main information is to be transmitted or from which the main information is to be received [Hashemi, page 2, ¶0025 and page 3, ¶0040, the plurality of computing devices notifying other communication unit (server) about information to be shared between the computing devices].

As per claim 3, Hashemi discloses the limitations, substantially as claimed, as described in claim 1, wherein one of said first information processing apparatus and said second information processing apparatus transmits, to the other apparatus, invitation information for inviting a connection [page 5, ¶¶0055-0056, a peer initiates session connection (requesting or inviting) by selecting available peer on the P2P network], and wherein the information processing apparatus receiving said invitation information transmits acceptance information indicating that said acceptance is received, to the information processing invitation that has transmitted said

invitation information when the invitation based on said invitation information is to be accepted [Hashemi, page 5, ¶¶0053-0056, P2P session established to share media information between the peer devices].

As per claim 4, Hashemi discloses the limitations, substantially as claimed, as described in claim 1, wherein one of said first information processing apparatus and said second information processing apparatus transmits, to the other apparatus, function information indicating which one of the bidirectional function and the unidirectional function the apparatus itself has [Hashemi, page 2, ¶¶0024-0025 and page 3, ¶0039 through page 4, ¶0044, peer devices configured to only send or only receive and/or both send and receive and a connection configuration information of each peer in the network being communicated to a central server notifying the capability and desire of sending and/or receiving media information between the plurality of peers in the P2P network].

As per claim 5, Hashemi discloses the limitations, substantially as claimed, as described in claim 4, wherein one of said first information processing apparatus and said second information processing apparatus determines whether or not the other party is able to communicate with the apparatus itself when said function information is received from the other party, and when the other party is able to communicate with the apparatus itself, the apparatus itself is registered in the other party [Hashemi, page 5, ¶¶0054-55, determination whether one peer is registered in the list of another

peer and likewise if the other party in the P2P has the same access based on the registered list].

As per claim 6, Hashemi discloses the limitations, substantially as claimed, as described in claim 4, further comprising a third information processing apparatus for transmitting said function information of one of said first information processing apparatus and said second information processing apparatus to the other party via said network [Hashemi, page 2, ¶¶0024-0025 and page 3, ¶0039 through page 4, ¶0044, peer devices configured to only send or only receive and/or both send and receive and a connection configuration information of each peer in the network being communicated to a central server notifying the capability and desire of sending and/or receiving media information between the plurality of peers in the P2P network].

As per claim 7, Hashemi discloses the limitations, substantially as claimed, as described in claim 6, wherein, to transfer the main information, the connection procedure performed between said first information processing apparatus and said second information processing apparatus is performed via said third information processing apparatus connected to said network, and wherein the transfer of the main information between said first information processing apparatus and said second information processing apparatus is performed without the intervention of said third information processing apparatus [Hashemi, page 5, ¶0058 information being communicated between

the peers via a central server and alternatively happening directly from peer to peer without the intervention of the central server].

As per claim 8, Hashemi discloses 8. An information processing system having a first information processing apparatus [Fig. 1A # 104 and Page 1, ¶0023, a first computing device] and a second information processing apparatus for transferring information via a network [Fig. 1, and Page 1, ¶¶0004-0008 and Page 2, ¶0024, any one of a the plurality of communication device receiving and/or transmitting information], said information processing system comprising: first execution means for performing a connection procedure for transferring main information in a first direction between said first information processing apparatus and said second information processing apparatus [Fig. 1A, # 104 (computing device) communication session established communicating media information to another peer (second computer) in the communication network]; and second execution means for determining whether at least one of said first information processing apparatus and said second information processing apparatus has a bidirectional function for transmitting the main information and for receiving the main information [page 2, ¶0024, "...the computing device...configured to both send and receive streams of media"], or has a unidirectional function such that the apparatus has a transmission function but not a receiving function [page 2, ¶0024, "...the computing device can also be configured to only send to only receive a stream of a media"], and for performing a connection procedure for transferring the

main information in a second direction differing from said first direction [Hashemi, page 2, ¶0025. "...computer 130 to communicate with other computers, ... such as another user computer... the connection module 134 configures computer 130 to communicate with the other computers or devices thereby establishing a connection. A connection or communication between computers can be established with a connection-oriented protocol, a connectionless oriented protocol, or both..." and page 3, ¶0039, Hashemi discloses that when a computer is only to send a stream of media information, then a P2P communication is established using a connectionless protocol and when the computer is configured to both transmit and receive establishing a P2P connection utilizing a TCP/IP].

Hashemi substantially disclosed the invention as recited. Hashemi further taught that the communication devices being configured to both receive and transmit and some communication devices being capable of only receiving or transmitting information objects between peers in the centralized P2P communication system as recited (see Hashemi, page 2, ¶¶0024-0025 & page 3, ¶0039). However, Hashemi is silent about the step of determining a bidirectional or a unidirectional function of the communication device. However, as evidenced by the teachings of Kim, determining a bidirectional or a unidirectional function of the communication device was known in the art at the time the invention was made (see Kim, Fig. 5, disclosed above, Column 4, Line 47 through Column 5, Line 25). Thus, it is respectfully submitted that it

would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings of Kim related to a function of determining a bidirectional and/or unidirectional capability of a communication device and have modified the teachings of Hashemi in order to facilitate the invention by allowing communication based on the capability of the communication terminals on the network (Hashemi, Page 2, ¶0024-0025, Page 3, ¶0039 and Kim, Column 5, Lines 5, Lines 3-30).

As per claim 9, Hashemi discloses 9 an information processing method for use in an information processing system comprising a first information processing apparatus [Fig. 1A # 104 and Page 1, ¶0023, a first computing device] and a second information processing apparatus for transferring information via a network [Fig. 1, and Page 1, ¶¶0004-0008 and Page 2, ¶0024, any one of a the plurality of communication device receiving and/or transmitting information], said information processing method comprising the steps of: performing a connection procedure for transferring main information from said first information processing apparatus to said second information processing apparatus [Fig. 1A, # 104 (computing device) communication session established communicating media information to another peer (second computer) in the communication network]; determining whether said first information processing apparatus has a bidirectional function for transmitting the main information and for receiving the main information [page 2, ¶0024, "...the computing device...configured to both send and receive streams of media"], or

has a unidirectional function such that said first information processing apparatus has a transmission function but not a receiving function [page 2, ¶0024, “....the computing device can also be configured to only send/receive to only receive a stream of a media”]; and performing a connection procedure for transferring the main information from said second information processing apparatus to said first information processing apparatus when said first information processing apparatus has said bidirectional function [page 2, ¶0025. “...computer 130 to communicate with other computers, ... such as another user computer... the connection module 134 configures computer 130 to communicate with the other computers or devices thereby establishing a connection. A connection or communication between computers can be established with a connection-oriented protocol, a connectionless oriented protocol, or both...” and page 3, ¶0039, Hashemi discloses that when a computer is only to send a stream of media information, then a P2P communication is established using a connectionless protocol and when the computer is configured to both transmit and receive establishing a P2P connection utilizing a TCP/IP].

Hashemi substantially disclosed the invention as recited. Hashemi further taught that the communication devices being configured to both receive and transmit and some communication devices being capable of only receiving or transmitting information objects between peers in the centralized P2P communication system as recited (see Hashemi, page 2, ¶¶0024-0025 & page

3, ¶0039). However, Hashemi is silent about the step of determining a bidirectional or a unidirectional function of the communication device. However, as evidenced by the teachings of Kim, determining a bidirectional or a unidirectional function of the communication device was known in the art at the time the invention was made (see Kim, Fig. 5, disclosed above, Column 4, Line 47 through Column 5, Line 25). Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings of Kim related to a function of determining a bidirectional and/or unidirectional capability of a communication device and have modified the teachings of Hashemi in order to facilitate the invention by allowing communication based on the capability of the communication terminals on the network (Hashemi, Page 2, ¶0024-0025, Page 3, ¶0039 and Kim, Column 5, Lines 5, Lines 3-30).

As per claim 10, Hashemi discloses an information processing method for use in an information processing system comprising a first information processing apparatus [Fig. 1A # 104 and Page 1, ¶0023, a first computing device] and a second information processing apparatus for transferring information via a network [Fig. 1, and Page 1, ¶¶0004-0008 and Page 2, ¶0024, any one of a the plurality of communication device receiving and/or transmitting information], said information processing method comprising the steps of: performing a connection procedure for transferring main information in a first direction between said first information processing apparatus and



said second information processing apparatus [Fig. 1A, # 104 (computing device) communication session established communicating media information to another peer (second computer) in the communication network]; determining whether at least one of said first information processing apparatus and said second information processing apparatus has a bidirectional function for transmitting the main information and for receiving the main information, [page 2, ¶0024, "...the computing device...configured to both send and receive streams of media"] or has a unidirectional function such that the apparatus has a transmission function but not a receiving function [page 2, ¶0024, "...the computing device can also be configured to only send or only receive a stream of a media"]; and performing a connection procedure for transferring the main information in a second direction differing from said first direction when said bidirectional function is possessed [page 2, ¶0025. "...computer 130 to communicate with other computers, ... such as another user computer... the connection module 134 configures computer 130 to communicate with the other computers or devices thereby establishing a connection. A connection or communication between computers can be established with a connection-oriented protocol, a connectionless oriented protocol, or both..." and page 3, ¶0039, Hashemi discloses that when a computer is only to send a stream of media information, then a P2P communication is established using a connectionless protocol and when the computer is configured to both transmit and receive establishing a P2P connection utilizing a TCP/IP].

Hashemi substantially disclosed the invention as recited. Hashemi further taught that the communication devices being configured to both receive and transmit and some communication devices being capable of only receiving or transmitting information objects between peers in the centralized P2P communication system as recited (see Hashemi, page 2, ¶¶0024-0025 & page 3, ¶0039). However, Hashemi is silent about the step of determining a bidirectional or a unidirectional function of the communication device. However, as evidenced by the teachings of Kim, determining a bidirectional or a unidirectional function of the communication device was known in the art at the time the invention was made (see Kim, Fig. 5, disclosed above, Column 4, Line 47 through Column 5, Line 25). Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings of Kim related to a function of determining a bidirectional and/or unidirectional capability of a communication device and have modified the teachings of Hashemi in order to facilitate the invention by allowing communication based on the capability of the communication terminals on the network (Hashemi, Page 2, ¶0024-0025, Page 3, ¶0039 and Kim, Column 5, Lines 5, Lines 3-30).

As per claim 11, Hashemi discloses an information processing apparatus for receiving information from a second information processing apparatus via a network, said information processing apparatus comprising: communication means for transmitting and receiving information [Fig. 1A, showing plurality of

communication devices transmitting and receiving information objected over the network and Page 1, ¶0023]; and control means for performing various processes, wherein said control [central server controlling communication of the communication model in sharing media information objects among plurality of computing devices, see page 3, ¶¶0033-0040] means performs: a first execution process for executing a connection procedure for receiving main information transmitted by said second information processing apparatus [Hashemi, page 3, ¶0040, central server receiving information from the peers in the network]; a determination process for determining whether said second information processing apparatus has a bidirectional function for transmitting the main information and for receiving the main information [page 2, ¶0024, "...the computing device...configured to both send and receive streams of media"], or has a unidirectional function such that the second information processing apparatus has a transmission function but not a receiving function [page 2, ¶0024, "...the computing device can also be configured to only send or only receive a stream of a media"]; and a second execution process for executing a connection procedure for said second information processing apparatus to receive the main information transmitted by said information processing apparatus when it is determined in said determination process that said second information processing apparatus has said bidirectional function [page 2, ¶0025. "...computer 130 to communicate with other computers, ... such as another user computer... the connection module 134 configures computer 130

to communicate with the other computers or devices thereby establishing a connection. A connection or communication between computers can be established with a connection-oriented protocol, a connectionless oriented protocol, or both..." and page 3, ¶0039, Hashemi discloses that when a computer is only to send a stream of media information, then a P2P communication is established using a connectionless protocol and when the computer is configured to both transmit and receive establishing a P2P connection utilizing a TCP/IP].

Hashemi substantially disclosed the invention as recited. Hashemi further taught that the communication devices being configured to both receive and transmit and some communication devices being capable of only receiving or transmitting information objects between peers in the centralized P2P communication system as recited (see Hashemi, page 2, ¶¶0024-0025 & page 3, ¶0039). However, Hashemi is silent about the step of determining a bidirectional or a unidirectional function of the communication device. However, as evidenced by the teachings of Kim, determining a bidirectional or a unidirectional function of the communication device was known in the art at the time the invention was made (see Kim, Fig. 5, disclosed above, Column 4, Line 47 through Column 5, Line 25). Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings of Kim related to a function of determining a bidirectional and/or unidirectional capability of a

communication device and have modified the teachings of Hashemi in order to facilitate the invention by allowing communication based on the capability of the communication terminals on the network (Hashemi, Page 2, ¶0024-0025, Page 3, ¶0039 and Kim, Column 5, Lines 5, Lines 3-30).

As per claim 12, Hashemi discloses the limitations, substantially as claimed, as described in claim 11, wherein, in said second execution process, when it is determined in said determination process that said second information processing apparatus has said unidirectional function, the connection procedure for said second information processing apparatus to receive said main information transmitted by said information processing apparatus is skipped [page 2, ¶¶0024-0025 and page 3, ¶0039, communication session is established or avoided based on peer capability/configuration (i.e., configured to send and receive or configured to only send/receive)].

As per claim 13, Hashemi discloses the limitations, substantially as claimed, as described in claim 11, wherein, in said first execution process, first connection information for receiving the main information transmitted by said second information processing apparatus is exchanged with said second information processing apparatus, and wherein, in said second execution process, second connection information for said second information processing apparatus to receive the main information transmitted by said information processing apparatus is exchanged with said second information processing apparatus [page 2, ¶0025 and page 3, ¶0039. "...computer 130 to

communicate with other computers, ... such as another user computer... the connection module 134 configures computer 130 to communicate with the other computers or devices thereby establishing a connection. A connection or communication between computers can be established with a connection-oriented protocol, a connectionless oriented protocol, or both..." allowing transmission of media objects between the communicating peers in the P2P network].

As per claim 14, Hashemi discloses the limitations, substantially as claimed, as described in claim 13, wherein, in said first execution process, said first connection information is received from said second information processing apparatus, and in said second execution process, said second connection information is transmitted to said second information processing apparatus [Hashemi, page 4, ¶0052 through page 5, ¶0056].

As per claim 15, Hashemi discloses the limitations, substantially as claimed, as described in claim 14, wherein control means performs a process for communicating with said second information processing apparatus on the basis of at least one of said first connection information and said second connection information [Hashemi, page 5, ¶0058, a media clip information is exchanged to another peer via a central server (control means)].

As per claim 16, Hashemi discloses the limitations, substantially as claimed, as described in claim 11, wherein control means performs a process for receiving invitation information for inviting a connection from said second

information processing apparatus via said communication means [page 5, ¶¶0055-0056, a peer initiates session connection (requesting or inviting) by selecting available peer on the P2P network] and for transmitting acceptance information indicating that said invitation is accepted, to said second information processing apparatus via said communication means when the invitation based on said invitation information is to be accepted [Hashemi, page 5, ¶¶0053-0056, P2P session established to share media information between the peer devices].

As per claim 17, Hashemi discloses the limitations, substantially as claimed, as described in claim 11, wherein control means further performs a process for receiving, via said communication means, function information indicating which one of said bidirectional function [page 2, ¶0024, configured to both receive and send] and said unidirectional function said second information processing apparatus has, and wherein said determination process determines which one of said bidirectional function and said unidirectional function said second information processing apparatus has [page 2, ¶0024-0025, configured to only send or receive].

As per claim 18, Hashemi discloses the limitations, substantially as claimed, as described in claim 17, wherein control means performs a process for determining whether or not communication with said second information processing apparatus is possible when said function information is received, and performs a process for registering said information processing apparatus

in said second information processing apparatus when communication with said second information processing apparatus is possible [page 3, ¶0035-0036, a central server informing peers on the P2P network about presence information of other peers and a peer initiating a session communication with another peer when available/possible status is determined].

As per claim 19, Hashemi discloses the limitations, substantially as claimed, as described in claim 17, wherein said control means further performs a process for transmitting said function information of said information processing apparatus to said second information processing apparatus via said communication means [page 3, ¶¶0033-0036 & ¶0040].

As per claim 20, Hashemi discloses the limitations, substantially as claimed, as described in claim 19, wherein said function information is transmitted to said second information processing apparatus via a third information processing apparatus on said network [page 5, ¶0058, via a third party, the central server].

As per claim 21, Hashemi discloses the limitations, substantially as claimed, as described in claim 17, wherein said function information of said second information processing apparatus is received via the third information processing apparatus on said network [page 5, ¶0058, via a third party, the central server].

As per claim 22, Hashemi discloses the limitations, substantially as claimed, as described in claim 11, wherein, to transfer the main information,



the connection procedure performed with said second information processing apparatus is performed via said third information processing apparatus connected to said network [page 5, ¶0058, via a third party, the central server on the centralized P2P network], and wherein, the main information transferred to and from said second information processing apparatus is transferred without the intervention of said third information processing apparatus [page 5, ¶0058, peer directly communicating with another peer].

As per claim 23, Hashemi discloses an information processing method for receiving information from a communication party via a network [Fig. 1A, showing plurality of communication devices transmitting and receiving information objected over the network and Page 1, ¶0023], said information processing method comprising: a first execution step of executing a connection procedure for receiving main information transmitted by said communication party [Hashemi, page 2, ¶¶0024-0025, configured to send and receive over the P2P network and page 3, ¶¶0033-0040, a central server controlling communication of the communication model in sharing media information objects among plurality of computing devices]; a determination step of determining whether the communication party has a bidirectional function for transmitting the main information and for receiving the main information [page 2, ¶0024, "...the computing device...configured to both send and/or receive streams of media"], or has a unidirectional function such that said communication party has a transmission function but not a receiving function

[page 2, ¶0024, “....the computing device can also be configured to only send or only receive a stream of a media”]; and a second execution step of executing a connection procedure for transmitting the main information when it is determined in the process of said determination step that said communication party has said bidirectional function [page 2, ¶0025. “...computer 130 to communicate with other computers, ... such as another user computer... the connection module 134 configures computer 130 to communicate with the other computers or devices thereby establishing a connection. A connection or communication between computers can be established with a connection-oriented protocol, a connectionless oriented protocol, or both...” and page 3, ¶0039, Hashemi discloses that when a computer is only to send a stream of media information, then a P2P communication is established using a connectionless protocol and when the computer is configured to both transmit and receive establishing a P2P connection utilizing a TCP/IP].

Hashemi substantially disclosed the invention as recited. Hashemi further taught that the communication devices being configured to both receive and transmit and some communication devices being capable of only receiving or transmitting information objects between peers in the centralized P2P communication system as recited (see Hashemi, page 2, ¶¶0024-0025 & page 3, ¶0039). However, Hashemi is silent about the step of determining a bidirectional or a unidirectional function of the communication device. However, as evidenced by the teachings of Kim, determining a bidirectional or a

unidirectional function of the communication device was known in the art at the time the invention was made (see Kim, Fig. 5, disclosed above, Column 4, Line 47 through Column 5, Line 25). Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings of Kim related to a function of determining a bidirectional and/or unidirectional capability of a communication device and have modified the teachings of Hashemi in order to facilitate the invention by allowing communication based on the capability of the communication terminals on the network (Hashemi, Page 2, ¶0024-0025, Page 3, ¶0039 and Kim, Column 5, Lines 5, Lines 3-30).

As per claim 24, Hashemi discloses a computer program for allowing a computer to perform a process for receiving information from a communication party via a network [Fig. 1A, showing plurality of communication devices transmitting and receiving information objected over the network and Page 1, ¶0023], said computer program comprising: a first execution step of executing a connection procedure for receiving main information transmitted by said communication party [Hashemi, page 2, ¶¶0024-0025, configured to send and receive over the P2P network, and page 3, ¶¶0033-0040, a central server controlling communication of the communication model in sharing media information objects among plurality of computing devices]; a determination step of determining whether said communication party has a bidirectional function for transmitting the main information and for receiving the main

information [page 2, ¶0024, "...the computing device...configured to both send and/or receive streams of media"], or has a unidirectional function such that said communication party has a transmission function but not a receiving function [page 2, ¶0024, "...the computing device can also be configured to only send or only receive a stream of a media"]; and a second execution step of executing a connection procedure for transmitting said main information to said communication party when it is determined in said determination process that said communication party has said bidirectional function [page 2, ¶0025. "...computer 130 to communicate with other computers, ... such as another user computer... the connection module 134 configures computer 130 to communicate with the other computers or devices thereby establishing a connection. A connection or communication between computers can be established with a connection-oriented protocol, a connectionless oriented protocol, or both..." and page 3, ¶0039, Hashemi discloses that when a computer is only to send a stream of media information, then a P2P communication is established using a connectionless protocol and when the computer is configured to both transmit and receive establishing a P2P connection utilizing a TCP/IP].

Hashemi substantially disclosed the invention as recited. Hashemi further taught that the communication devices being configured to both receive and transmit and some communication devices being capable of only receiving or transmitting information objects between peers in the centralized P2P

communication system as recited (see Hashemi, page 2, ¶¶0024-0025 & page 3, ¶0039). However, Hashemi is silent about the step of determining a bidirectional or a unidirectional function of the communication device. However, as evidenced by the teachings of Kim, determining a bidirectional or a unidirectional function of the communication device was known in the art at the time the invention was made (see Kim, Fig. 5, disclosed above, Column 4, Line 47 through Column 5, Line 25). Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings of Kim related to a function of determining a bidirectional and/or unidirectional capability of a communication device and have modified the teachings of Hashemi in order to facilitate the invention by allowing communication based on the capability of the communication terminals on the network (Hashemi, Page 2, ¶0024-0025, Page 3, ¶0039 and Kim, Column 5, Lines 5, Lines 3-30).

As per claim 25, Hashemi discloses an information processing apparatus for transmitting information to a second information processing apparatus via a network [Fig. 1A, showing plurality of communication devices transmitting and receiving information objected over the network and Page 1, ¶0023], said information processing apparatus comprising: communication means for transmitting and receiving information [Hashemi, page 2, ¶¶0024-0025, configured to send and receive]; and control means for performing various processes, wherein said control means performs: a first execution process for

executing a connection procedure for transmitting main information to said second information processing apparatus [page 3, ¶¶0033-0040, a central server controlling communication of the communication model in sharing media information objects among plurality of computing devices]; a determination process for determining whether said second information processing apparatus has a bidirectional function for transmitting the main information and for receiving the main information [page 2, ¶0024, "...the computing device...configured to both send and/or receive streams of media"], or has a unidirectional function such that the second information processing apparatus has a transmission function but not a receiving function [page 2, ¶0024, "...the computing device can also be configured to only send or only receive a stream of a media"]; and a second execution process for executing a connection procedure for said information processing apparatus to receive the main information transmitted by said second information processing apparatus when it is determined in said determination process that said second information processing apparatus has said bidirectional function [page 2, ¶0025. "...computer 130 to communicate with other computers, ... such as another user computer... the connection module 134 configures computer 130 to communicate with the other computers or devices thereby establishing a connection. A connection or communication between computers can be established with a connection-oriented protocol, a connectionless oriented protocol, or both..." and page 3, ¶0039, Hashemi discloses that when a

computer is only to send a stream of media information, then a P2P communication is established using a connectionless protocol and when the computer is configured to both transmit and receive establishing a P2P connection utilizing a TCP/IP].

Hashemi substantially disclosed the invention as recited. Hashemi further taught that the communication devices being configured to both receive and transmit and some communication devices being capable of only receiving or transmitting information objects between peers in the centralized P2P communication system as recited (see Hashemi, page 2, ¶¶0024-0025 & page 3, ¶0039). However, Hashemi is silent about the step of determining a bidirectional or a unidirectional function of the communication device. However, as evidenced by the teachings of Kim, determining a bidirectional or a unidirectional function of the communication device was known in the art at the time the invention was made (see Kim, Fig. 5, disclosed above, Column 4, Line 47 through Column 5, Line 25). Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings of Kim related to a function of determining a bidirectional and/or unidirectional capability of a communication device and have modified the teachings of Hashemi in order to facilitate the invention by allowing communication based on the capability of the communication terminals on the network (Hashemi, Page 2, ¶0024-0025, Page 3, ¶0039 and Kim, Column 5, Lines 5, Lines 3-30).

As per claim 26, Hashemi discloses the limitations, substantially as claimed, as described in claim 25, wherein, in said second execution process, when it is determined in said determination process that said second information processing apparatus has said unidirectional function, the connection procedure for said information processing apparatus to receive said main information transmitted by said second information processing apparatus is skipped [Hashemi, page 2, ¶¶0024-0025 and page 3, ¶0039, communication session is established or avoided based on peer capability/configuration (i.e., configured to send and receive or configured to only send/receive)].

As per claim 27, Hashemi discloses the limitations, substantially as claimed, as described in claim 25, wherein, in said first execution process, first connection information used by said second information processing apparatus to receive the main information transmitted by said information processing apparatus is exchanged with said second information processing apparatus, and, wherein, in said second execution process, second connection information used by said information processing apparatus to receive the main information transmitted by said second information processing apparatus is exchanged with said second information processing apparatus [page 2, ¶0025 and page 3, ¶0039. "...computer 130 to communicate with other computers, ... such as another user computer... the connection module 134 configures computer 130 to communicate with the other computers or devices thereby establishing a connection. A connection or communication between computers can be



established with a connection-oriented protocol, a connectionless oriented protocol, or both..." allowing transmission of media objects between the communicating peers in the P2P network].

As per claim 28, Hashemi discloses the limitations, substantially as claimed, as described in claim 27, wherein, in said first execution process, said first connection information is transmitted to said second information processing apparatus, and wherein, in said second execution process, said second connection information is received from said second information processing apparatus [Hashemi, page 4, ¶0052 through page 5, ¶0056].

As per claim 29, Hashemi discloses the limitations, substantially as claimed, as described in claim 28, wherein control means performs a process for communicating with said second information processing apparatus on the basis of at least one of said first connection information and said second connection information [Hashemi, page 5, ¶0058, a media clip information is exchanged to another peer via a central server (control means)].

As per claim 30, Hashemi discloses the limitations, substantially as claimed, as described in claim 28, wherein control means further performs a process for transmitting invitation information, for inviting a connection, to said second information processing apparatus via said communication means [page 5, ¶¶0055-0056, requesting or inviting by selecting available peer on the P2P network], and wherein said first execution process transmits said first connection information to said second information processing apparatus when

the invitation based on said invitation information is accepted [page 5, ¶¶0053-0056, acceptance (i.e., a P2P session established to share media information between the peer devices)].

As per claim 31, Hashemi discloses the limitations, substantially as claimed, as described in claim 25, wherein control means further performs a process for receiving, via said communication means, function information indicating which one of said bidirectional function [page 2, ¶0024, configured to both receive and send] and said unidirectional function said second information processing apparatus has, the function information being transmitted by said second information processing apparatus, and wherein said determination process determines, on the basis of said received function information, which one of said bidirectional function and said unidirectional function said second information processing apparatus has [page 2, ¶0024-0025, configured to only send or receive].

As per claim 32, Hashemi discloses the limitations, substantially as claimed, as described in claim 31, wherein control means performs a process for determining whether or not communication with said second information processing apparatus is possible when said function information is received, and performs a process for registering said information processing apparatus in said second information processing apparatus when communication with said second information processing apparatus is possible [page 3, ¶0035-0036, a central server informing peers on the P2P network about presence

information of other peers and a peer initiating a session communication with another peer when available/possible status is determined].

As per claim 33, Hashemi discloses the limitations, substantially as claimed, as described in claim 31, wherein control means further performs a process for transmitting said function information of said information processing apparatus to said second information processing apparatus via said communication means [page 3, ¶¶0033-0036 & ¶0040].

As per claim 34, Hashemi discloses the limitations, substantially as claimed, as described in claim 33, wherein said function information is transmitted to said second information processing apparatus via a third information processing apparatus on said network [page 5, ¶0058, via a third party, the central server].

As per claim 35, Hashemi discloses the limitations, substantially as claimed, as described in claim 31, wherein said function information of said second information processing apparatus is received via the third information processing apparatus on said network [page 5, ¶0058, communication via a third party (the central server)].

As per claim 36, Hashemi discloses the limitations, substantially as claimed, as described in claim 25, wherein, to transfer the main information, the connection procedure performed with said second information processing apparatus is performed via said third information processing apparatus connected to said network [page 5, ¶0058, via a third party, the central server

on the centralized P2P network], and wherein the main information transferred to and from said second information processing apparatus is transferred without the intervention of said third information processing apparatus [page 5, ¶0058, peer directly communicating with another peer].

As per claims 37 and 38, Hashemi discloses a computer program and an information processing method for transmitting main information to a communication party via a network [Fig. 1A, showing plurality of communication devices transmitting and receiving information objected over the network and Page 1, ¶0023], said information processing method comprising: a first execution step of executing a connection procedure for transmitting main information to said communication party [page 2, ¶¶0024-0025, configured to send and receive over the P2P network, and page 3, ¶¶0033-0040, ...sharing media information objects among plurality of computing devices]; a determination step of determining whether said communication party has a bidirectional function for transmitting the main information and for receiving the main information [page 2, ¶0024, "...the computing device...configured to both send and/or receive streams of media"], or has a unidirectional function such that said communication party has a transmission function but not a receiving function [page 2, ¶0024, "...the computing device can also be configured to only send or only receive a stream of a media"]; and a second execution step of executing a connection procedure for receiving the main information transmitted by said information processing

apparatus when it is determined in the process of said determination step that said communication party has said bidirectional function [page 2, ¶0025. "...computer 130 to communicate with other computers, ... such as another user computer... the connection module 134 configures computer 130 to communicate with the other computers or devices thereby establishing a connection. A connection or communication between computers can be established with a connection-oriented protocol, a connectionless oriented protocol, or both..." and page 3, ¶0039, Hashemi discloses that when a computer is only to send a stream of media information, then a P2P communication is established using a connectionless protocol and when the computer is configured to both transmit and receive establishing a P2P connection utilizing a TCP/IP].

Hashemi substantially disclosed the invention as recited. Hashemi further taught that the communication devices being configured to both receive and transmit and some communication devices being capable of only receiving or transmitting information objects between peers in the centralized P2P communication system as recited (see Hashemi, page 2, ¶¶0024-0025 & page 3, ¶0039). However, Hashemi is silent about the step of determining a bidirectional or a unidirectional function of the communication device. However, as evidenced by the teachings of Kim, determining a bidirectional or a unidirectional function of the communication device was known in the art at the time the invention was made (see Kim, Fig. 5, disclosed above, Column 4,

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Line 47 through Column 5, Line 25). Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings of Kim related to a function of determining a bidirectional and/or unidirectional capability of a communication device and have modified the teachings of Hashemi in order to facilitate the invention by allowing communication based on the capability of the communication terminals on the network (Hashemi, Page 2, ¶0024-0025, Page 3, ¶0039 and Kim, Column 5, Lines 5, Lines 3-30).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Fernando et al. (US 20040034776 A1) entitled: "Authenticating P2P connections"
- b. Harvey et al (US 20050033806 A1) entitled: "System and Method for Communicating Images between Intercommunicating users"
- c. Li et al. (US 20030182428 A1) entitled: "Peer-to-peer (P2P) communication system"

- d. Traversat et al. (US 7206841 B2) entitled: "Rendezvous for locating peer-to-peer resources"
- e. Traversat et al. (US 7136927 B2) entitled: "Peer-to-peer resource resolution"
- f. Traversat et al. (US 7065579 B2) entitled: "System using peer discovery and peer membership protocols for accessing peer-to-peer platform resources on a network"

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yemane M. Gerezgiher whose telephone number is (571) 272-3927. The examiner can normally be reached on 9:00 AM - 6:00 PM Mon - Fri.

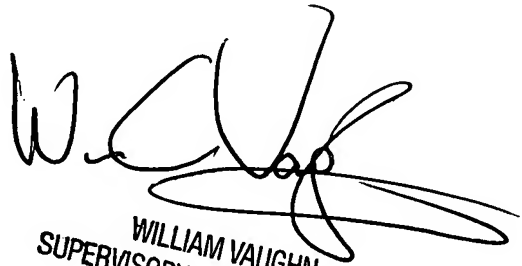
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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